Gas Journal

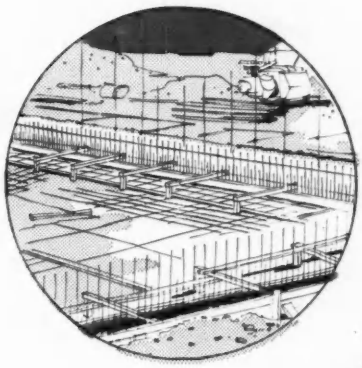
VOL. 307 | 113th YEAR | LONDON, AUGUST 30, 1961 | No. 5113 | PRICE 1/6

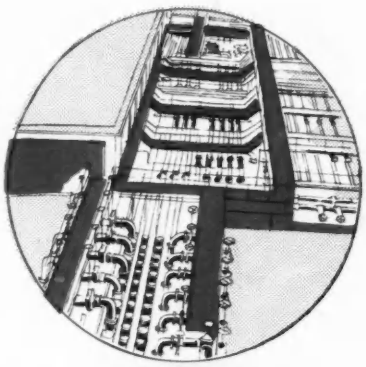
THE UNIVERSITY OF MICHIGAN

SEP

ENGINEERING LIBRARY

VERSATILITY...

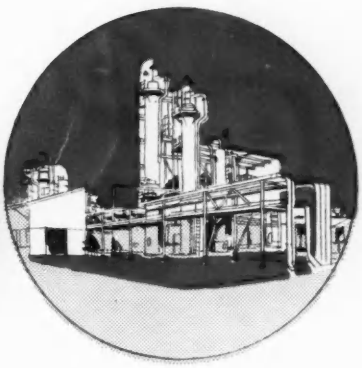




Specialists in

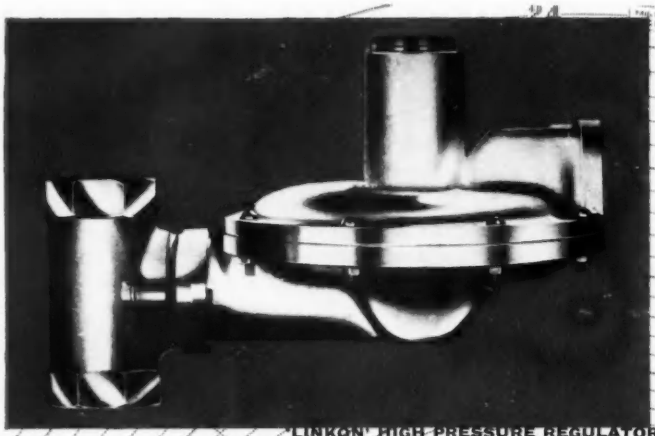
CIVIL ENGINEERING
INDUSTRIAL PIPEWORK
PIPELINE CONSTRUCTION
PIPEWORK FABRICATION
MECHANICAL ENGINEERING
PLANT ERECTION

FOURTEEN DEPOTS THROUGHOUT GREAT BRITAIN

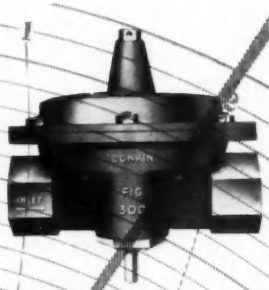


WILLIAM PRESS AND SON LIMITED

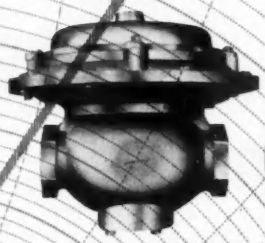
22 Queen Anne's Gate, London, S.W.1 Tel: WHitehall 5731
Willoughby Lane, Tottenham, London, N.17 Tel: TOTtenham 3050
Telegrams: Totpress, London, Telex Telex No. 25365



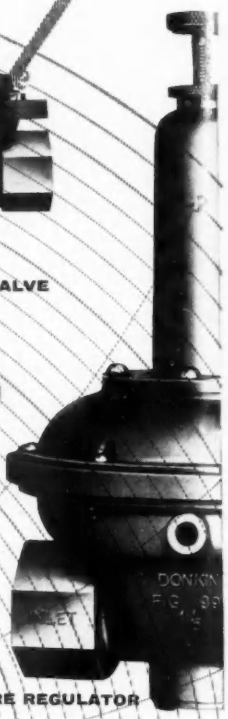
'LINKON' HIGH PRESSURE REGULATOR



SAFETY CUT OFF VALVE



DIAPHRAGM PRESSURE REGULATOR



LOW PRESSURE REGULATOR

equipment for the control of gas

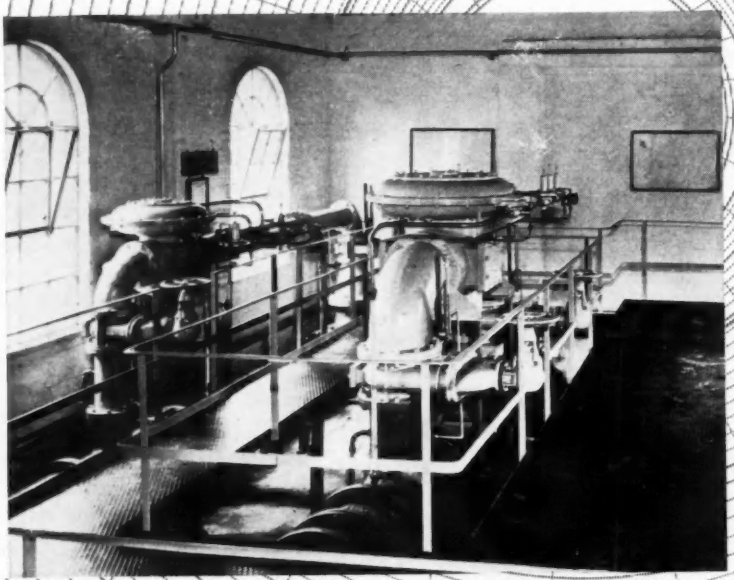
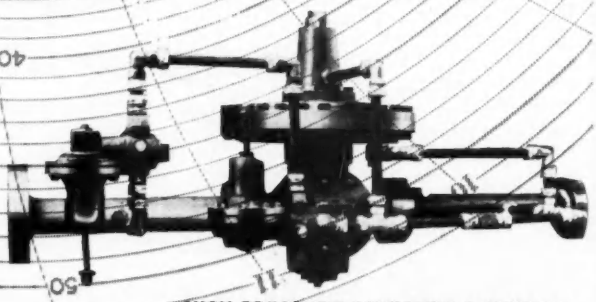


Illustration shows an 8" Volumetric Governor on the left supplying gas to a holder, and on the right a 14" Station Governor, clock controlled to give three pressures daily

Gas Regulators of many sizes are made in diameters between ¾" and 36" for use on gases to operate on either a pressure or volume basis, covering a very wide range of flows to suit the process to which they are applied.

High and low pressure gas regulators have been supplied to the Gas Industry for many years and with the recent advances in liquid petroleum gases and natural gas, our regulators have been used for pressure and volumetric control.

Many special features giving exceptional safeguards have been provided e.g.:— Governors have been fitted with secondary diaphragms so that if one fails a slightly higher 'emergency' pressure is maintained but the regulator remains in service available to handle its full capacity.



HIGH PRESSURE GOVERNOR ASSEMBLY

The

BRYAN DONKIN

Company Limited

CHESTERFIELD Telephone 3153

LONDON Telephone ABBey 1096

No kidding

...if your problem is flame protection or thermostatic control

PERL
CONTROLS LTD.

can solve it

For full details of Perl flame-protection systems, automatic igniter sets, magnetic and relay valves, thermostats, etc.

write
Fleming Way, Crawley, Sussex or 'phone Crawley 25115-6-7
— and see !

Gas Journal

VOLUME 307 • NUMBER 5113 • 113th YEAR

WEDNESDAY, AUGUST 30, 1961

CONTENTS

EDITORIAL COMMENT

The 'Image' of Fixing Charges - - - - - 243

SPECIAL ARTICLE

The Gas Industry—in the Future. By R. Kelf-Cohen, 245

TECHNICAL RECORD

Instrumentation and Control Aspects of the Australian Gas Light Company's No. 9 Unit C.W.G. Plant. By J. G. B. Whitelaw - - - 250

NEWS SUPPLEMENT

Liquid Methane Imports: Work-starved Shipyards Await State Decision - - - - - - 253
A Smile for a Century - - - - - - - 253
A Carnival Prizewinner - - - - - - - 253
Opening Speaker - - - - - - - - 253
Wise Choice for Tyne Dock Homes - - - - 254
Northern Luxury Flats Have Gas-Warmed Air - - 254
Old Age Pensioners Live in New All-Gas Flats - - 255
Keith Blackman Profits Increase - - - - 255
Pictures Tell Story of Gas in the North - - - 255
Company Meeting: Parkinson Cowan Ltd. - - 256
New Issue of 'Clean Air Year Book' - - - 256
Calor Gas Dividend - - - - - - 256
Agreement on Control Devices - - - - 256
£222,000 Bill for Fittings - - - - - 256
New Plant for Ammonia - - - - - 256
Russia Orders Conveyor Belts - - - - - 256
Northern Juniors Hold Annual Meeting - - - 257
Personal Notes - - - - - - - - 257
Coming Events - - - - - - - - 257

Editor:
GEOFFREY W. BATTISON

Assistant Editor:
WALTER F. TRUMAN

Technical Editor:
CHARLES J. P. DE WINTON
T.D., M.A., M.I.Gas E., M.Inst.F.

Publishers' Notice, See Page 258.

SUCCESSFUL INSTRUMENTATION : QUALITY & ACCURACY

THE

FAIRWEATHER RECORDING CALORIMETER MARK II

THIS INSTRUMENT IS KNOWN THROUGHOUT THE GAS INDUSTRY FOR ITS ACCURACY AND RELIABILITY.

IT IS APPROVED BY THE MINISTRY OF POWER FOR OFFICIAL TESTINGS, IT IS ALSO INVALUABLE FOR WORKS' CONTROL PURPOSES.

A NEW ILLUSTRATED HANDBOOK, DEALING FULLY WITH THEORY, CONSTRUCTION, MAINTENANCE AND TESTING — IS NOW AVAILABLE.

★ ★ ★

THE

PRECISION LABORATORY TEST METER, MARK II

1/50th cu. ft. TEST METER

SUPPLIED IN 1/50th AND 1/10th CU. FT., SIZES GIVING DIRECT READINGS IN CU. FT. TO THREE DECIMAL PLACES.

ALSO IN 0·5 AND 2·5 LITRE SIZES, WITH REVOLUTION COUNTER READING IN LITRES.

METER CASING AND DRUM SOUNDLY CONSTRUCTED IN A SPECIAL QUALITY STAINLESS STEEL THAT IS RESISTANT TO MOST FOUL GASES.

SPECIALLY DESIGNED FOR SELF-SERVICING. READILY DISMANTLED AND JUST AS READILY REASSEMBLED.

TOTALLY ENCLOSED REVOLUTION COUNTER, OF IMPROVED DESIGN, ENSURING FRICTIONLESS MOVEMENT AND FREEDOM FROM CORROSION.

ILLUSTRATED, DESCRIPTIVE LEAFLET SENT ON REQUEST

SCIENTIFIC & PROJECTIONS LTD.

Engineers, Instrument Makers and Gear Specialists

POWERSCROFT ROAD, CRAY ROAD, FOOTSCRAY, KENT

Telephone : FOOTSCRAY 9292 (4 lines)

Gas Journal

COKE OVENS • BY-PRODUCTS • CHEMICALS

The 'image' of fixing charges

OF the many and varied factors which constitute the public's impression and opinion of the gas industry—the image, as we have come to call it—none is more difficult to assess or more distasteful to some sections of the industry than the vexed question of fixing charges: In general the industry seems to believe that these are realistic and fair. In stating our belief that they are neither realistic nor, at least in the eyes of the consumer, fair, we are not likely to endear ourselves to the gas boards at any level, or to the unions. Nevertheless, the matter is important and, skeleton in the meter cupboard though it may be, it requires to be dragged out and subjected to a cold scrutiny.

Our concern with the cost to the consumer of fitting appliances stems from the conviction that, no matter how justifiable these may appear to the gas boards, they are frequently regarded by the public as exorbitant. We believe that the industry would be well advised to look at the matter with two questions in mind: Is this work being carried out as inexpensively as possible? And is the cost being recovered in the most intelligent manner?

The answer to the first point is almost certainly in the negative. Although a great deal has been done to simplify installation methods by standardisation, anyone with an ear for such matters can discern the widespread dismay and dissatisfaction on the part of consumers who find that their outlay on a new appliance must in fact be increased, perhaps by several pounds, to cover the fixing. Far too many people believe that the gas board is taking them for a ride. Some of them fail to appreciate the fact that what sometimes appears as a simple job is in fact quite involved, that existing service pipes may be insufficient, and so on. But what of those who watch the work of a fitter and his frequently redundant mate, time their efforts in, say, dropping a fire into position and connecting up, and assess the number of visits of men and vehicles? Sometimes these complaints boil over into the newspaper correspondence columns, or into the agenda of the Gas Consultative Councils, but far more frequently they are borne without protest to the board, the consumer feeling that he would be wasting his time; this does not, however, prevent him from expressing his dissatisfaction to friends and neighbours, who may be influenced by this alone against investing in a new gas appliance themselves.

High on the list of questions to be answered is whether the gas boards should in fact carry out straightforward fixing work in the first place? This is a thorny problem and the solution must inevitably vary according to the incidence of reliable contractors in any area and to their quoting a competitive price. We cannot help but feel, however, that the contractor's clearly defined object of making as much money as possible in the shortest time (which is a perfectly moral one, provided that he is prepared to maintain proper standards) is some way removed from the attitude of mind exhibited by some gas boards' fitting departments. The installer, working on a basis of time and material plus 15%, would make a good living, and the gas boards would be free to divert fitters to maintenance service only.

Again, we wonder whether the standard of fixing work required is not sometimes too high, or perhaps we should say, too expensive. The growing acceptance of small bore central heating has shown that consumers are not as critical of exposed pipework as was once believed. More thought might therefore be given to reducing the amount of floorboard disturbance and perhaps laying pipework at floor level, screened perhaps by some suitable moulding, or at skirting board level.

One of the more damaging aspects of the present situation is the fact that gas boards are not consistent in their policy. If one board sells cookers 'fixed free to point' and an adjacent board does not, confusion is bound to arise. Agreement on a national policy would enable better use to be made of national publicity.

What should that policy be? Well, we are in no position to assess the situation fully, but we are prepared to stick our necks out and suggest what we *think* it should be. Cookers should be fixed 'free to point'; all fires should be 'fixed free to adequate point at hearth'; refrigerators should be 'fixed free,' and the same goes for wash boilers if they are to be adjacent to the cooker.

The point to remember is that gas is at a substantial

disadvantage compared with electricity. The customer who buys an electric fire seldom has to worry about anything except the attachment of a suitable plug. Not so the purchaser of a gas fire who has not only the trouble but frequently also the expense of having somebody come along and connect up; as gas points are less common than electric points the operation may well be more involved. Fear of the unknown fixing charge can be a considerable deterrent to a sale, and the industry would be well advised to render fixing as painless as possible.

Take cookers for example. The position at present is that the gas industry can ill afford anything which may hamper a sale, and although the recovery of the cost of 'free' fixing may mean an increase in the advertised price of the cooker, is that extra amount (surely £2 at most?) going to make such a difference? If the industry can effectively sell gas cooking, 30s. or so on the price of the appliance, spread perhaps over four years, is not likely to deter many would-be purchasers. It would not, of course, be practicable to make any refund in the case of people who did not want the gas board to fix the cooker, but here again we cannot see that this would be any deterrent to purchase—although it might have the desirable result of dissuading consumers to 'do it themselves'.

In spite of the industry's apparent dislike of the method, the day may well come when we must consider the provision of armoured flexible couplings for exchange cooker connections. After all, the fact that we have used fundamentally the same technique for the past 50 years or so does not necessarily mean that nothing better could be found!

A 'cosy' of room heaters

THIS must be a very encouraging time for gas salesmen anxious to get to grips with an autumn space heating drive. The range of room heaters available, although adequate enough, has become a little too familiar; and for some time the need has been felt for new models to stimulate the consumer's interest. Now, apparently following the maxim that 'It never rains but it pours,' we have four spanking new appliances arriving within the space of a month. For want of a better word we might call it a veritable 'cosy' of room heaters! What is even more remarkable is the fact that two of the newcomers come from makers who have not previously participated in this market—Parkinson Cowan and Flavel.

First to arrive was the Parkinson Cowan 'Sundown,' followed closely by the Radiation 'Sunbeam' (one hopes this similarity of name will not arouse too much confusion). The Flavel 'Debonair' and the Main 'Selsdon' appeared in hot pursuit. All four are valuable assets to the industry and have individual points of appeal, sharing only a high standard of performance.

The 'Sundown' is so-named because of the warm glow which is maintained in the centre of the radiants even when the thermostat is turned down to its lowest setting. Heat from the radiant is supplemented by black radiant heat emitted from the panel above the radiants which is in fact the front of the heat exchanger box. The 'Sunbeam' boasts a special automatic damper which is self-regulating to close progressively as the chimney pulls more strongly and to open again as the pull becomes less. The 'Debonair' breaks new ground in having a handsome wood surround and a ventilation control which steps up the number of air changes per hour and acts as an air conditioner. The main attraction of the 'Selsdon' is its price (under £17) which, taken into consideration with its good appearance and high efficiency, makes it extremely good value.

Meanwhile, Bratt Colbrans are planning a particularly high pressure advertising campaign for that 'Gas fire gorgeous,' the 'Walmer.' This appliance has not so far made the biggest claim on the 'popular' market, but by its exceptionally good aesthetic design it has contributed a great deal to the prestige of this new load for gas, and there seems good reason to suppose that its appeal will be a fairly lasting one.

With the continuance of other tried and trusted heaters, the gas industry enters the season with a very strong hand indeed.

We understand—although nobody bothered to tell us officially—that the Gas Council has let it be known to the S.B.G.I. that they favour the term 'room heater' in preference to any of the other descriptions employed for this type of appliance. It is nice to think that some attempt has been made to clear up a situation which has hampered national advertising and must have done much to confuse people unfamiliar with the advantages of this new kind of heating medium. We only hope the powers that be have chosen the best name.

There is a school of thought which believes that with the decline in popularity of the solid fuel fire, the public is receptive to the idea of another 'fire' taking its place —either gas or electric. It is further believed that with the right type of publicity it is possible to eradicate the old-fashioned conception of a gas fire, imbuing the words with a new image.

The chief supporters of this view are the East Midlands Gas Board who have passionately rejected 'room heater' and have set out to show that the public can be persuaded to buy the new style gas fire—or 'gasfire,' as they prefer to put it. In view of the fact that they have proved their point to the extent of selling nearly 1,000 fires a week during the summer months and expect to sell more than 70,000 during the year, it is unlikely that they will do anything to spoil the magic formula.

The East Midlands Board is not the only one to favour the retention of 'gas fire.' With the exception of the four Boards in the Greater London area, this name seems to be used fairly commonly around the country. It all makes things more difficult for the manufacturer.

Our own view is that none of the terms in current usage is right. We need an entirely new word to which the word 'gas' can be prefixed.

The gas industry —in the future

Points from the report of the select committee on nationalised industries dealing with the gas industry appeared in last week's 'GAS JOURNAL'. In this article a more detailed analysis is given, with commentary.—

By R. Kelf-Cohen, C.B.

THE forbidding Blue Book entitled 'Report from the select committee on nationalised industries—the gas industry' will, we hope, become a best seller in all ranks of the gas industry. It is the first enquiry into the industry since it was nationalised in 1949.

Before examining the report, a few words on the select committee and its reports might not be out of place. The select committee were born out of a general sense of frustration in the House of Commons that it was out of touch with the industries which had become publicly owned.

It has now investigated all the nationalised industries, except the newly reorganised electricity supply; but, as that only got going in 1959, it is too young for an enquiry.

The reports of the select committee have become longer and longer; that on gas is by far the longest of all. The report on the National Coal Board was only 21 pages; even the report on the railways—that massive headache—was only 89 pages; but gas receives 119 pages.

The first volume

There has only been published Volume I, which is the report itself; Volume II containing the minutes of evidence, and written memoranda, will probably be about 500 pages.

It is tantalising to read the report without the evidence; one is continually itching to turn back to the evidence and see for oneself how the committee built their conclusions.

Select committees are always appointed afresh at the beginning of each session. The select committee were very strong, being reinforced by Mr. Aubrey Jones, who was Minister of Fuel and Power from December 1955 to January 1957.

The report is badly overdue, and despite its length and thoroughness can hardly be regarded as of the same value as that of a non-parliamentary committee of experts, like the Herbert Committee on Electricity. That committee held no less than 63 meetings and paid many visits to the electricity industry in various parts of the country; it worked for 16 months and its report was inevitably followed by legislation.

Select committees sit in the House of Commons, and must finish their work inside a Parliamentary Session, at the end of which the mandate expires; they consist of back benchers from all parties who are interested in the subject, but not necessarily equipped with the training and knowledge most likely to help in any individual enquiry.

Nor are they allowed any technical staff—such as accountants or engineers—who could help them by preparing memoranda on which to base their enquiries; for constitutional reasons their total staff consists of two House of Commons clerks.

The select committee have therefore done remarkably well to produce such a thorough and well-informed report in the eight months they have been working, and undoubtedly the great burden of this effort must have fallen on the Chairman, Sir Toby Low.

In the case of gas, the enquiry was lengthened because all the 12 chairmen of the area boards had to be individually interviewed. But the heaviest task fell on Sir Henry Jones, who appeared before the committee seven times.

Sir Henry, however, might be consoled by the thought that this is not a record for a chairman of a nationalised industry; Sir Brian Robertson last year appeared before the select committee 12 times.

The report falls into five parts and to review it thoroughly would require far more space than is available in 'GAS JOURNAL.' Part I is a history of the industry since vesting day. This tells a familiar story, but it is clear that the select committee were throughout concerned to ascertain how far the autonomy of the 12 area boards had prevented the industry from operating as 'a single entity.'

Very fierce competition

In 1961 gas, as an industry, faces very fierce competition from other fuels. Can the industry act as a unit in facing this competition? Apparently since 1957 doubts had appeared in the Gas Council 'whether gas would not be cheaper if it were produced on a scale that transcends the operations of any single board at present' (para. 24).

As the report goes on to say (para. 25): 'Twelve years after vesting day it may be necessary to make changes in the industry's organisation.'

Meanwhile the report notes the main facts—satisfactory and unsatisfactory—arising from the integration carried

out by the 12 boards—each, of course, planning for itself. The circumstances of each board differ widely.

Productivity has risen; more and more functions have been centralised. Improvements have been made in the supply and distribution of gas—though at no small capital cost.

The Ministry of Power receive a few raps for interfering with the policy of the industry—in a manner unknown to Parliament. The select committee have, in all their enquiries, discovered this unfortunate tendency of Ministers to interfere with the nationalised industries behind the scenes.

They have repeatedly protested and, as in this case, have recommended that where the Minister interferes—outside his statutory powers—he should lay a written statement before Parliament.

Their protest on interference with the Air Corporations was heeded by the Government in the Civil Aviation (Licensing) Act 1960. But on interference in the price of coal, the Government flatly refused to listen to the select committee.

Finance—strong criticism

Part II deals with finance. Here the select committee have some strong criticisms. 'Depreciation provisions and surpluses earned have been quite insufficient to finance even the replacement element in the capital programmes of the industry, let alone allowing anything for expansion' (para. 118). This must be read together with the statement (para. 157) that 'the money for the simple replacement of an industry's assets should be provided by the industry itself. Borrowing was justifiable only to provide for the expansion of the industry or for investment that would result in reducing the industry's costs.'

The committee do not add, as they should have done, that mere reduction in costs of production and distribution is not enough. The reduction in cost should be greater—indeed substantially greater—than the additional burden arising from the use of the new capital. How many of the capital schemes of the gas industry of the last ten years would pass a severe accountancy check of this kind?

In this part, the committee draw attention to the recent change in Government policy on the financing of nationalised industries laid down in the White Paper Cmnd. 1337. 'The operation of the nationalised industries with an unduly low rate of return on capital is sooner or later damaging to the economy as a whole' (para. 142).

Borrowing expectation

With this White Paper in mind, the committee express surprise that the East Midlands Board, which sells the cheapest gas in the country, 'should in 1959-60 have expected to borrow as much as two-thirds of its capital expenditure' in the next seven years.

The committee's general conclusion is 'that a high expenditure of capital has resulted in a comparatively small increase in the sale of a more expensive gas; this in turn has led to the accumulation of only a small trading surplus. A large part of the new capital borrowed from public funds has provided merely for replacements. In future the new Government policy will insist on better financial results' (paras. 168-170).

On control of capital investment, the committee have discovered that neither Ministry nor Gas Council make any technical appraisal of the Board's capital programmes. As for the Gas Council's scrutiny, the Committee opine that: 'The Council can, of course, be relied on to give an honest judgment on problems placed before them; but, on the hallowed principle of "Buggins' turn now," they are unlikely to be too severe on the aspiration of each other' (para. 126).

Part III of the report deals with the commercial position, with which readers of 'GAS JOURNAL' will be familiar. After a discussion of tariffs the committee come to the conclusion that 'the picture is not reassuring.' They then examine the forecasts of demand for gas in the five years ending in 1959-60, which were put out in 1954 in 'Fuel for the nation.'

On the evidence of the facts the committee conclude 'that the discrepancy between forecast and out-turn of total sales was serious'; and the Gas Council, according to the chairman, were 'puzzled' and 'worried' by the failure of sales to increase in accordance with their estimates (para. 201).

But if the Gas Council had re-examined page 24 of 'Fuel for the nation' they would have seen that the reasons which they gave for anticipating for an increase in domestic consumption were just not good enough.

Restrictions on hire purchase or the level of purchase tax affect electricity as much as gas and are not the deep seated causes for the decline in domestic consumption; they are minor influences, the effect of which is trivial.

In May 1960 hire purchase restrictions were reimposed after 18 months of freedom: but domestic consumption increased in 1960-61 to 1,279 mill. therms from 1,268 mill. in 1959-60.

This is regarded by the committee as 'concrete evidence of progress' (para. 213) that the 'greatest gain by the industry in the future would be in the domestic field,' which was the emphatic contention by the Chairman of the Gas Council.

Year of prosperity

But the weather in 1960 was much inferior to 1959; it was also a year of great prosperity. There were 7½ mill. tons more coal consumed in 1960 than 1959, the domestic consumer taking 2.3 mill. tons more. Electricity consumption went up by 12%.

No doubt there was some improvement in domestic space and water heating. But an increase of less than 1% in domestic consumption of gas, which is still 30 mill. therms short of 1958-59 should not suggest that there has been a reversal in the long term trend. There have been temporary increases in earlier years, e.g., in 1954-55, which were soon reversed.

The committee conclude Part III by deciding that the industry must find a cheaper gas and that 'the crucial element in the price of gas is the cost of production.' They accordingly devote Part IV to production and summarise the well-known facts about the different types of gas bought or made by the industry.

An interesting section of Part IV deals with the relations between gas and the National Coal Board 'which have, at their best, been wintry.' The National Coal Board are becoming conscious of the risk of losing the market for gas making coals, but the committee suggests that even so the price of these coals may be uneconomic for both the coal and the gas industries (para. 327).

There is also an interesting section on research in which the committee come to some glum conclusions. 'It cannot be said that great results have so far attended the British gas industry's research work' (para. 360); 'there sems to have been something irresolute about the Gas Council's attitude to research' (para. 362); and finally, 'it is freely acknowledged that the gas industry, which still bases so much of its production on the 19th century processes which have served it well in the past, is in need of some new ideas' (para. 364).

But by far the most important part of the committee's report is Part V—'The future of the industry.' It is by the recommendations in this part that the report will be judged.

Part V reviews the technological changes of recent years —such as underground storage, Lurgi gasification and the importation of liquid methane, with which readers of 'GAS JOURNAL' will be familiar.

By 1957 the Gas Council decided to explore the possibility of large-scale production which would result in gas cheaper than area boards could supply from their own plants.

In November 1959 'the Council accepted the principle of a national grid' which would pipe gas to several area boards (para. 373), but 'fundamentally a national grid could not be built until "a really economic project" for making gas was found on which to build' (para. 377). It is against this background that the Lurgi and imported methane developments are examined by the committee.

Price estimates

Estimates are given of the price of gas which could be produced by these two methods and they are summarised in para. 439. On Lurgi there are differences of opinion between Gas Council and National Coal Board. Some of the estimates are rough. The committee point out that all these figures involve some premature obsolescence of existing plants, which is not easy to calculate precisely.

The committee conclude 'that the gas industry must have a cheaper gas at the earliest possible moment' (para. 441). A large Lurgi plant and imported methane could supply the industry with 20% of its current requirements. A scheme for importing methane is before the Minister on which he will give his decision before long.

The strength of the coal lobby and present anxieties about the balance of payments make it doubtful whether the Government will agree.

But suppose they do, is the structure of the gas industry such as will enable it to handle projects for supplying gas to several boards?

This leads the committee to consider 'the future structure of the industry' (pages 111-118). This is the vital part of the Report. 'Each area board chairman has two hats to wear, his area hat and his Council hat; and this means that there may be a point of strain in the present system when decisions on specific actions, rather than on general policy, need to be taken by the Council' (para. 445).

Three views emerge

The committee conclude, therefore, 'that the present structure of the industry is not suitable for developing and establishing large scale production and distribution facilities' (para. 453).

What is to be done? Three views emerge from the committee's report. The first is the view of the Ministry of Power 'which had no reason to think that the structure of the industry was impeding its progress' (para. 451). In other words no change was required in the present set-up.

On the other hand, the Chairman of the Gas Council, though not dissatisfied at what had happened in the past, 'thought they had now reached the point, on the production side, where the structure was impeding progress' (para. 451).

He therefore argued 'that the coming of multi-area forms of production indicates the necessity of additional powers being granted to the Council' (para. 451).

In other words the Gas Council's 'powers should be increased to include the manufacture and supply of gas' (para. 455).

There is some argument whether, in fact, the Council already possess statutory powers on these lines, but this is of less importance than the practical difficulties of working such powers, which depend on the assent of the boards. The committee are therefore not enamoured of this suggestion and put forward their own scheme.

This is for the creation of a 'thirteenth board, to undertake all new gas generation on a large-scale and to control such aspects of national gas supply on a national gas grid and underground storage.'

The committee do not elaborate this proposal but, when they put it to the Gas Council, they acknowledged that though the idea presents difficulties, it is a practical possibility. The committee quote the analogy of the Central Electricity Generating Board, which is a very weak analogy.

There is only one type of electricity and only one producer. The production of electricity is therefore clearly defined and has been since 1926, and high tension distribution is equally clear in definition; none of this applies to gas.

The need for cheaper gas is urgent, but the evidence that it will be brought about by large-scale Lurgi or imported methane is not overwhelming. In any case the latter scheme bristles with political difficulties.

The Government must decide whether the urgent need for cheaper gas is so compelling that some body must be given the task of trying out a large-scale experiment. The committee's report shows that the Ministry are not convinced.

Production units

If they are convinced it will not be enough to create a central gas production board and increase the Gas Council with two or three of its representatives; these unfortunate people will make little headway.

The Gas Council would have to be completely reconstituted. There is nothing sacrosanct about the number of the area boards, which were largely modelled on the regional organisation which administered the country during the war.

If the boards were reduced from 12 to eight or even less (though Scotland and Wales are exempt on political grounds) much larger units of production would become feasible.

A smaller Gas Council would also be an advantage. The concept of a national gas grid will not really stand up to close examination, especially from the economic angle. The total supplies to be derived from imported methane and large Lurgi plants are about 20% of present consumption which might well be absorbed by one or two enlarged boards, without the complication of a national gas grid or a central gas production board.

As said earlier, it is a pity that the select committee have to rush their report and finish it by July. They have done excellently, and the report is well-written and deserves the closest study by all ranks in the gas industry. Every District Association and Junior Association should devote a full day to a discussion of the report. It will stimulate ideas which might help the Gas Council. One thing is clear. The industry cannot remain in its present dubious and static position. That only means decline. If decline is to be avoided, major decisions must be made in the next year or two.

Flavel's 'modern image' gas room heater designed to capture public imagination—to capture big sales!

The exciting Flavel DEBONAIR

Warm air...Fresh air...Debonair! Most exciting gas appliance ever to hit the showroom floor. Different a dozen times over... better, a dozen different ways. Most advanced gas room heater ever, designed with a modern image for modern homes!

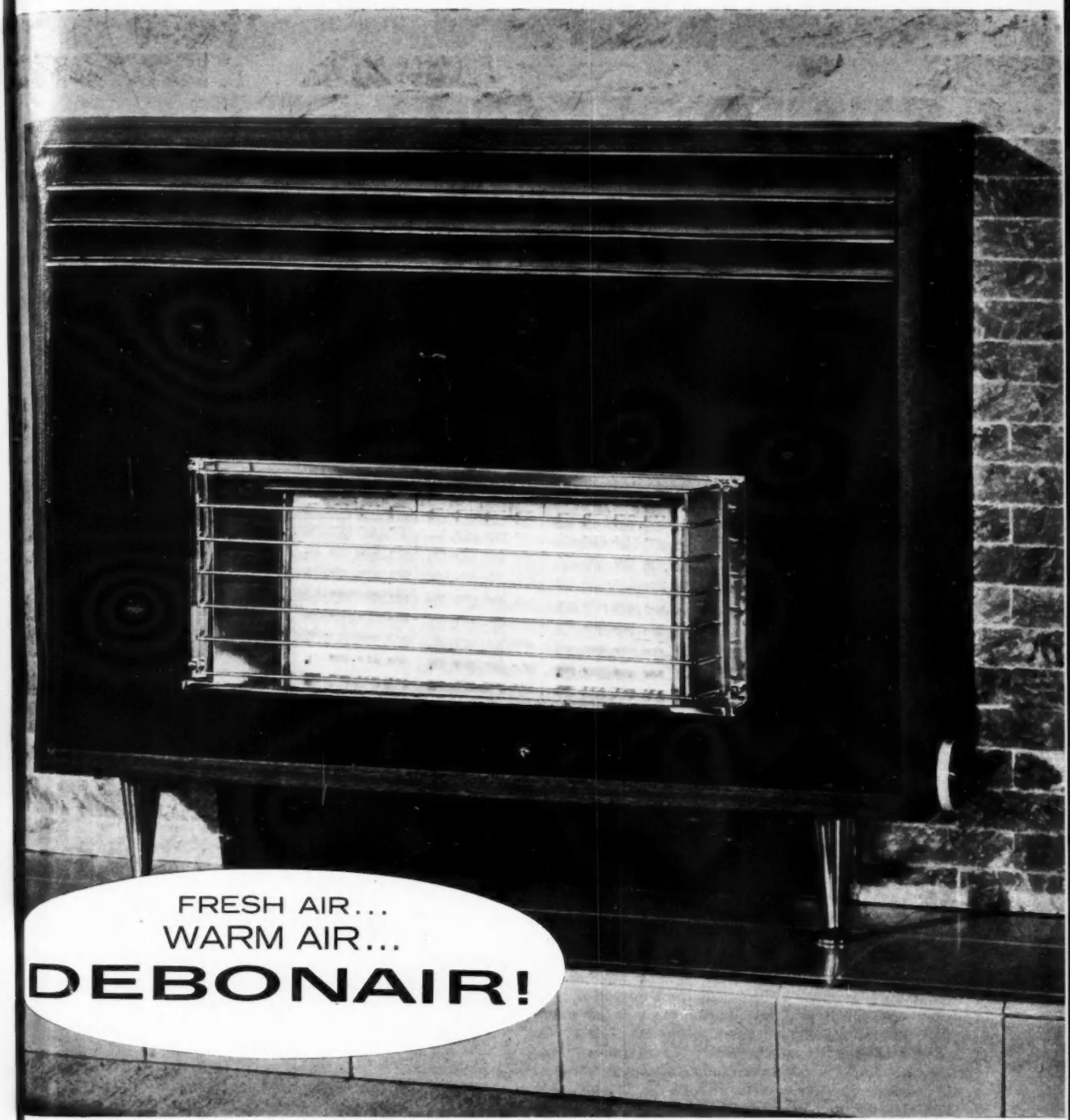
'MODERN IMAGE'

- Created in the modern style by a brilliant young award-winning design consultant in association with Flavel's design and development team.
- The new Debonair is more than a heater—a striking piece of furniture planned with contemporary furnishing trends in mind.
- Clean-sweeping lines . . . vitreous-enamelled blueberry fascia . . . gleaming convector louvres trimmed in rustless steel . . . radiants surrounded by rustless steel and heavy chromium plate . . . contemporary legs in lacquered brass finish.
- Natural wood surround in choice of Sapele Mahogany or Light Oak, with permanent, toughened polyester finish that needs no polishing.

BIG HEAT—FRESH AIR!

- Full-on heat output equivalent to 3 kilowatts.
- 3 big radiants. Exclusive design, wide convector louvres for "spread-over" heat.
- Continuous flow of warmed, fresh air wraps the whole room in healthy warmth.
- One simple control enables the user to extinguish the 2 outer radiants, leaving the centre radiant at full brilliance.
- Changes the room air 2 or 3 times every hour.
- Patented ventilation-control for *additional* fresh air in crowded rooms.
- Battery-operated automatic ignition.

RETAIL PRICE ONLY **£25.6.7.**
(INC. P. TAX)



Now you can help your customers to furnish their homes with warmth!

Flavel are supporting this fabulous new gas room heater with their biggest national advertising campaign yet.

A Debonair display in your showroom is a must. The Debonair bristles with talking points, with demonstration points.

It's the modern image, the new look you've been waiting for — your customers, too!

FLAVEL

SIDNEY FLAVEL & CO. LTD.
EAGLE FOUNDRY · LEAMINGTON SPA
TELEPHONE 8700

THE COMPANY THAT KEEPS AHEAD!

Instrumentation and control aspects of the Australian Gas Light Company's No. 9 unit c.w.g. plant.

IN 'GAS JOURNAL,' July 19, 1961, p. 81-84, was an article by Dr. G. Milner, Power-Gas Corporation, England, and Mr. N. G. Mather, Australian Gas Light Company, Sydney, N.S.W., entitled 'World's largest single unit carburetted water gas plant.' The Power-gas Corporation (Australasia) Pty., Ltd., a subsidiary of the Power-Gas Corporation, of Stockton-on-Tees, has just completed the acceptance tests for this plant which was described. With a guaranteed capacity of 9 mill. cu.ft. per day of 550-c.v. gas, it is capable of a peak load capacity of more than 12 mill. cu.ft. per day. In the accompanying article details are given of instrumentation on the plant.

By

J. G. B. WHITELAW, B.Sc., B.E.

A CENTRAL control room, with a comprehensive arrangement of instruments, was proposed in order to satisfy two basic objectives in the planning of the 9-12 mill. cu.ft. per day water gas plant.

The first objective was to cater for a minimum of operating labour. This required centralised presentation of all important plant-operating characteristics and alarm conditions, and the provision of automatic control systems which would cause the plant to be as self-regulating as economically feasible.

The latter, together with high reliability fail safe features, was aimed to allow the operator a maximum amount of time for the purpose of routine plant checks outside the control room, and to enable his full attention to be focused on unusual circumstances as they might arise.

The second objective was to provide for the recording of relevant data which could be used subsequently for plant efficiency checks and as a guide to operational adjustments.

Here is a brief description of the control room, instruments, and two important automatic control features—the coke charger and the exhauster control.

The control room is located 38 ft. 6 in. from the ground, at the same level as the top of the generator. Continuous glazing around three walls allows a panoramic view of the major plant vessels and important hydraulic valves. Generator ash dips are carried out from a landing immediately outside the control room and ready access is available to the electrical switchgear room, the waste heat boiler, jacket boiler, wash box and carburetter sections of the plant. Exhauster, oil and feedwater pumps, and other auxiliary equipment located at ground level may be reached by stairs or by means of an elevator.

The control room houses the hydraulic operator, instrument panel, air conditioning plant and amenities for the plant operator.

Of conventional Power-Gas Corporation design, the hydraulic operator contains adjustable cams which govern the operating times of the hydraulically operated process valves, together with the usual interlocks for safe sequential operation of these valves.

The instrument panel, 8 ft. high, is surmounted by a large mimic diagram of the plant which extends to the full height of the 14 ft. 6 in. ceiling. The existing panel is 27 ft. long, but the design of the room allows for the ultimate extension of this panel to provide for three more plants of this nature.

Indicating lamps, actuated by the valve limit switches, are located adjacently to their respective valve on the mimic to indicate the valve position.

Push button controls for the electrically motorised valves are located on the instrument panel directly below the respective valves and are identified with the valves.

Principal instruments present the following data:

(*a*) *For operational monitoring and plant control:* Temperature records of thermocouples situated in the generator (top—1, grate—5), carburettor, superheater (2), waste heat boiler gas (2). A fast, single point temperature recorder provides information complementary to the ash dips by measurement of the temperature of the back run gas as it leaves the grate. Temperature of the gas leaving the condensers is controlled by the automatic operation of the blower in the cooling tower.

Indications of gas pressure in main air line, generator (base and top), superheater (top and base), washbox (outlet), waste heat boiler (inlet and outlet), and exhauster (inlet and outlet).

Grate drive hydraulic pressure is recorded together with a manual speed control facility.

Flow records of primary, secondary and tertiary air, process steam and oil. These particular instruments are grouped around the hand-wheel controlling the degree of opening of the respective regulating

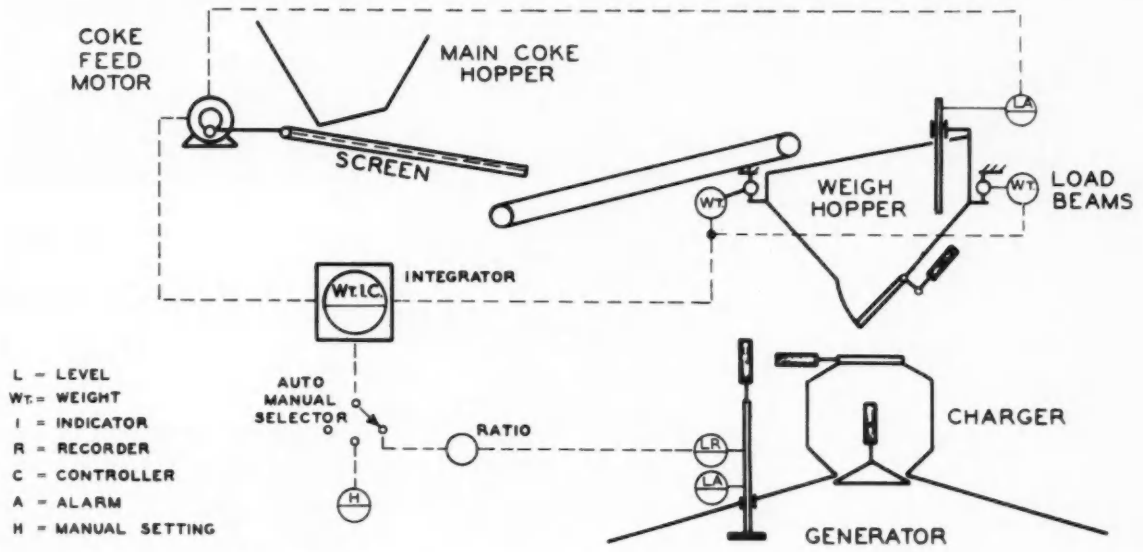


FIG. 2. AUTOMATIC COKE CHARGER

valves. The regulating valves, in series with the process cycle valves, fix the input flows of the above quantities according to manual settings.

Other instruments present pressures of feedwater, recirculating liquor, hydraulic oil, instrument air; temperatures and pressures of h.p., l.p. steam and works steam supply; flow of gas, and calorific value of gas which is retransmitted from the works operations control centre.

Ammeters for all electric motors with ratings above 10 h.p. are mounted on the panel.

(*b*) *For plant efficiency checks, in addition to the preceding:* Integration of inputs including coke, gas-making oil and steam, together with relevant records of temperatures and pressures.

Quality and quantity of the make gas are checked and logged in the works operations control centre.

(*c*) *For alarm conditions:* Green 'safe' and red 'warning' lamps with audible alarm pinpoint trouble in any of 70 alarm circuits. Actuation of certain alarms, causes an automatic plant shut down. These alarms are: High temperature of gas exit condensers, low flow of washbox liquor, low level of hydraulic fluid, low pressure of hydraulic fluid, hydraulics solenoid shut, operator failure, Nos. 1 or 2 hydraulic pump failure, high relief holder, low process air pressure and high plant gas pressure.

(*d*) *Gas flow:* One Holmes-Connersville gas meter of capacity 500,000 cu.ft. per hour has been installed. The meter is provided with a local integrator together with a remote differential pressure indicator and tachograph located in the plant control room.

In the event of excessive drag or seizure of the meter rotor, the gas may be diverted through a motorised by-pass valve operated from the control room. The meter will eventually fit into a general works scheme for automatic temperature and pressure correction and logging of meter readings.

Automatic fuel charger (Fig. 2.): The generator is provided with a system which automatically adjusts the quantity of coke fed into it each cycle, by using the deficiency in actual fuel bed as reference.

Coke from the main storage hopper is fed across a vibrating screen to a short belt supplying the weigh hopper. The latter, supported by load beams, is situated directly above the charger on top of the generator.

The generator is provided with a hydraulically operated dip probe which, at the command of the hydraulic operator, senses the fuel bed level. The probe drops into the generator until the resistance of the fuel bed is encountered, whereupon a valve reverses the direction of hydraulic thrust on the probe, causing it to retract immediately.

In dipping into the generator, the probe turns a potentiometer to produce a direct current signal proportional to the sampled fuel bed deficiency. This deficiency signal, fed through a ratio multiplier adjusted for coke bulk density factors, sets a target weight on the weigh hopper indicator.

Coke is next fed into the weigh hopper until the target weight is reached, whereupon the feed automatically stops. A short time before the next dip, the weighed coke is allowed to drop into the charger and the target potentiometer is reset to zero. The coke is retained in the charger for a major portion of the plant cycle before entering the generator.

The coke charge weights are accumulated and registered on a counter, while the fuel bed signal is recorded on a strip chart recorder thus presenting a sampled record of bed level.

Provision has been made for manual setting of the coke target weight so that, if desired, equal preset weights of coke may be fed cyclically into the generator.

In the event of failure of the automatic weighing system or pneumatically powered target setting mechanism, the amount of coke brought forward each cycle will be determined by the setting of a limit electrode situated within the weigh hopper.

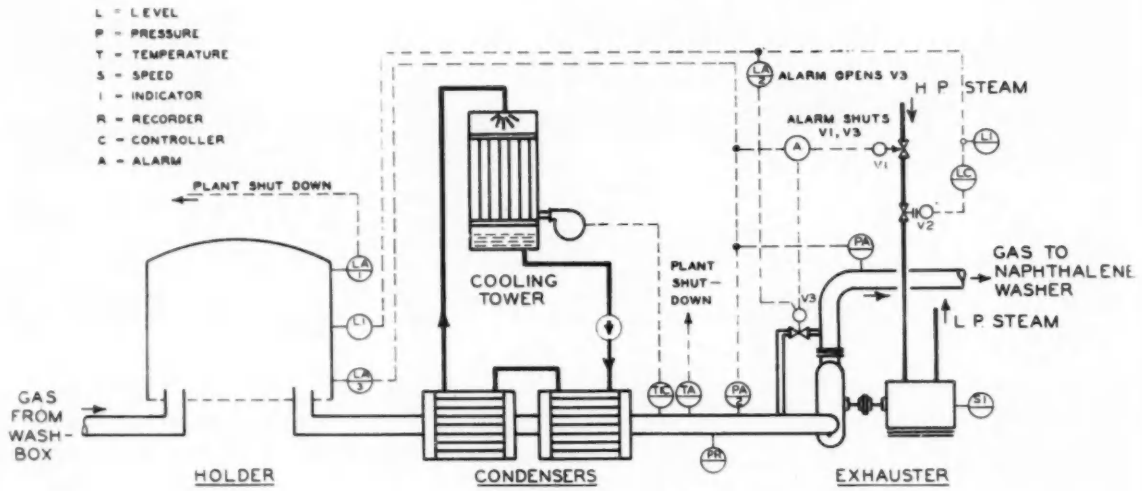


FIG. 3. HOLDER – CONDENSERS – EXHAUSTER SECTION OF PLANT

The feed is stopped when the rising level of coke touches the electrode, forming a conductive path to earth via the hopper itself. The electrode is easily adjustable and overrides the action of the automatic charger.

Holder-exhauster control. (Fig. 3.): The relief holder has the primary function of absorbing cyclic variations in rate of gas made by the plant. These cyclic variations under quasi-steady conditions at rated capacity, produce a peak to peak holder movement of approximately 20% of its effective travel.

The object of the holder-exhauster control system is to reduce to a minimum the rate of change, on a long time (many cycles) basis of the flow of gas leaving the plant. That is, it acts as a low pass filter to disturbances such as random or deliberate changes in plant make, where the degree of filtering is dependent upon the controller settings.

The optimum controller settings depend on a relationship between the holder capacity and the greatest likely disturbance—bearing in mind the requirements of unattended operation.

The relief holder has a total travel of 33 ft. 6 in. and a volumetric capacity of 120,000 cu.ft. It is a 'hot gas' holder, situated immediately downstream of the washbox, and is provided with separate inlet and outlet mains. The holder is fitted with a height transmitter, producing a 0-15 m.a. d.c. signal for the height indicator in the control room and which also acts as input signal to the controller.

The exhauster is a Waller Roots type blower of capacity 585,000 c.f.h., driven by a 125 h.p. recriprocating steam engine passing out steam to the low pressure system. Gas is drawn from the holder through the primary and secondary condensers to the exhauster which boosts it through the naphthalene washer, detarrer, purifiers and gas meter.

Rate of gas flow, determined by exhauster speed, is adjusted by the action of a pneumatically-powered control valve located in the high pressure steam line to the exhauster prime mover.

The valve control signal contains a proportional relationship to the deviation of the holder from its desirable level, i.e., its mean 'working' height. In addition to the proportional action, an integral term is introduced in the controller.

This, in effect corrects, over a period of many cycles, any offset in holder level caused by different rates of gas make or gas pressure conditions downstream of the plant. Hence, full use may be made of the holder capacity to enable a wider proportional band to be used in the controller.

In order to prevent a cyclic rise and fall in the exhauster speed through proportional action by the controller, a dead band, approximately equal to the maximum cyclic variation in holder level was introduced into the height transmitter. This means that the transmitter delivers a signal which is, in effect, a function of the mean cyclic holder height.

Air pressure failure causes a lock-out device on the control valve to 'freeze' the latter in its last set position. Manual control of the exhauster may then be effected by the operation of manual series and by-pass steam valves.

The holder is safeguarded by three features. The first of these is an alarm relay in the holder height signal circuit which, at the 'low level' setting, opens a gas by-pass around the exhauster.

If the holder continues to fall, an overriding, solenoid-triggered, shut-off steam valve is released by the breaking of an independent holder low level switch.

This has the action of stopping the exhauster completely. In addition, the breaking of this circuit closes the by-pass valve around the exhauster, preventing gas from flowing back from the works.

Pressure switches in the inlet and outlet exhauster gas mains are arranged also to break this circuit.

The third, 'last resort' safeguard is in the form of a mechanical plug, attached by chains to the underside of the holder crown, which covers the entrance to the exit main just before grounding.

The principal supplier of instruments was Honeywell Controls Ltd., who also co-operated with Davy and United Instruments Ltd. in the design of the automatic coke charger.

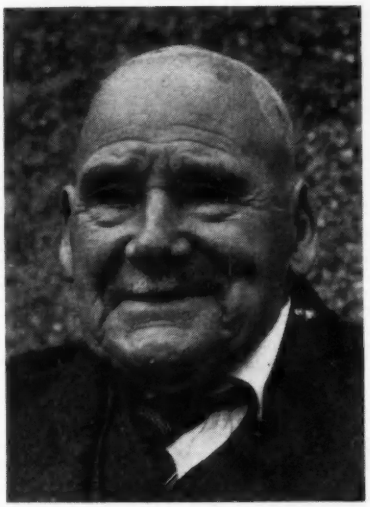
The holder-exhauster control system was supplied by Evershed and Vignoles Ltd.

Bailey Meters and Controls Pty. Ltd. manufactured the instrument panel and mimic locally.

The whole work was carried out under the supervision of the Power-Gas Corporation (Australasia) Pty. Ltd.

NEWS SUPPLEMENT

A smile for a century



CELEBRATING his hundredth birthday on September 2 is a pensioner of the North Thames Gas Board. He is Mr. George Brett who, before he retired, was mains foreman with the Gas Light and Coke Company's Distribution Department at Westminster.

Mr. Brett was with Distribution for 48 years ('and a fortnight,' he insists). He still recalls clearly those years of work, and says that he owes his long life, free of illness, to hard work and plenty of exercise—especially walking.

When he was on the district, Mr. Brett walked whenever he could. He looked after mains from the Strand to Kensington and from Bayswater to Chelsea.

Mr. Brett, in spite of his great age, is still active, and tends his garden regularly.

Mr. Brett had an exceptionally long and happy married life of 70 years. His wife was 96 when she died four years ago.

LIQUID METHANE IMPORTS

Work-starved shipyards await State decision

THE Government's decision on the import of liquid methane—which the recent select committee report urged should be made without delay—is awaited with keen interest in shipping circles, writes *The Times* shipping correspondent.

He says: A favourable decision would let British shipping and shipbuilding in on the ground floor of an entirely new form of specialised activity.

The two ships proposed to bring the liquid from the Sahara to Canvey Island would be the world's first specially designed methane carriers.

TECHNICAL LEAD

Besides providing two valuable orders for the work-starved shipyards, they would give Britain a technical lead in the field.

So far as ownership is concerned, a straw in the wind was the recent registration of a new company, Methane Tanker Finance, with Mr. Cyril Warwick, deputy chairman of Houlder Brothers, as director.

OWNERSHIP

Though charters have not yet been signed, it is expected that Houlders would own one ship, and Conch International (jointly owned by Shell and American interests) the other, the correspondent says.

Both vessels would be demise chartered to British Methane Ltd. (jointly owned by Conch and the Gas Council) and operated by a shipping company under a management contract.

There are vast reserves of methane and, with or without this initial fillip from the Government, an extensive international traffic in the liquid form seems certain to develop in the next decade.

As it is such a concentrated form of fuel, the shipping requirements would never rival those of, for instance, the oil or ore industries, the correspondent writes.

Ten carriers fed from the Sahara could supply all Britain's gas requirements.

Opening speaker

The opening address at the 1961 Conference of the Purchasing Officers' Association at Brighton, September 28, will be given by Mr. Edward Heath, the Lord Privy Seal, who will talk on 'The Common Market'.

A carnival prizewinner

The vehicle shown in the photograph was entered by the Prestatyn Undertaking of the Wales Gas Board in the Prestatyn Carnival and took second prize against keen competition.

Wise choice for Tyne Dock homes

INSTALLATION of gas warmed-air heating on a large scale in local authority dwellings has just been accomplished by the Tyneside Division of the Northern Gas Board at South Shields, where the Tyne Dock flats have recently been opened officially. This is part of the borough's Tyne Dock Redevelopment Scheme.

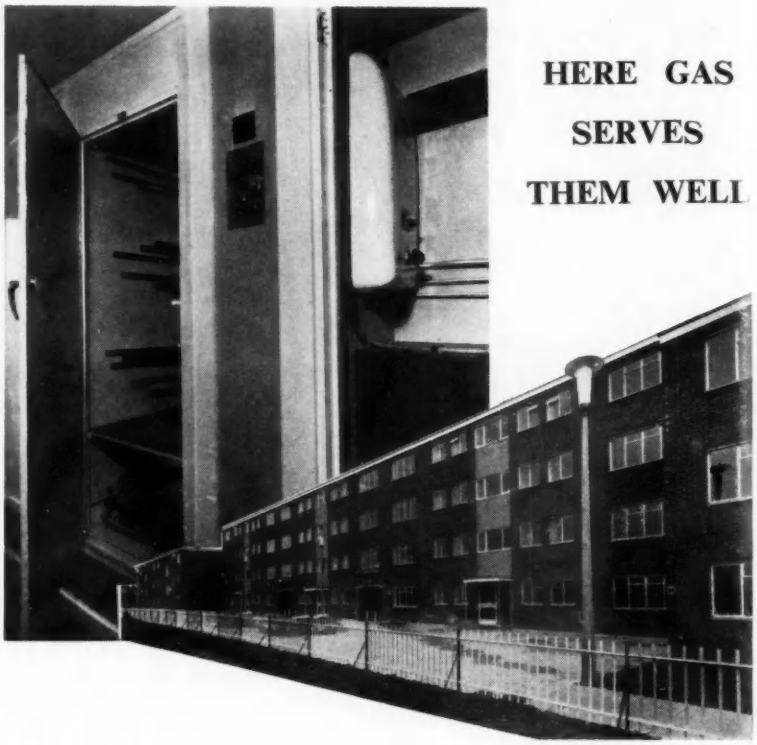
A system incorporating the Sugg Halcyon selective warm air heater in conjunction with the SE-Duct was decided upon.

The SE-Duct is an essential core to the heating system with the Halcyon air heater, the Ascot water heater and a Clifford clothes dryer discharging into it.

The supply of hot water is by Ascot instantaneous multipoint gas heater which is located in a cupboard immediately above the air heater.

The Clifford clothes drying and airing unit is fitted in each kitchen.

Cooking is by means of a Parkinson Pearl gas cooker.



HERE GAS SERVES THEM WELL

The exterior of the Tyne Dock flats is here superimposed on a Clifford clothes drier installation, with the adjacent control panel for the Halcyon heater and Ascot multipoint water heater.

NORTHERN LUXURY FLATS HAVE GAS-WARMED AIR

THE photographs below show the 11-storey block of 44 luxury flats built at Whitley Bay by one of the North-East's leading builders, J. M. Liddell & Son. The flats comprise, living room, two bedrooms and kitchenette and are in the £4,500/£5,000 class.

They are unique in being the first block of flats built by private enterprise in the North-East of England to incorporate the SE-Duct and to use gas warmed air as their sole means of space heating.

The heater used is Sugg's Halycon/FSD, and ducts are led to the living room, kitchen and hall with spill over heating to the bedrooms.

A Leisure gas cooker is standard in the kitchenette.

Tests have shown that an extremely comfortable heat standard is obtained very quickly in all rooms and the builder is extremely satisfied with the installation. All work from the planning stage to the complete installation was carried out by the Board.

A great interest has been shown in this installation by local builders and members of authorities, many of whom have visited the flats. The Tyneside Division of the Northern Gas Board is confident that future orders of this type will follow.

Eleven-storey flats at Whitley Bay with (right) the spacious kitchenette of one of these flats.

Old Age Pensioners live in new all-gas flats

FIVE blocks of four flats, providing 20 dwellings for old age pensioners, have been opened at Green Lane, Ince-in-Makerfield, by Mr. Tom Brown, M.P., J.P., Member for the Ince Division. These are claimed to be the first all-gas flats to have been built by an Urban District Council.

The opening was attended by the Deputy Chairman of the North Western Gas Board, Mr. W. Hodkinson (in the absence of the Chairman) and by the Chairman of Ince Urban District Council, who is also Chairman of the Housing Committee, Councillor T. Sharples, J.P.

Each flat has individual tenant-controlled, fanned warm air heating by gas-fired Halcyon units. Ascot water heaters provide unlimited hot water constantly on tap.

Under draining board

A gas washboiler is conveniently installed under the draining board, and provision is made for a gas cooker and gas refrigerator.

Above the heating unit in the hall is a large airing cupboard big enough to store clothes and bedding.

Mr. Brown expressed his delight with the heating and thanked the Board for making the advantages of scientific improvements available to the old people.

Councillor A. Rowlandson, proposing a toast to the Board at a luncheon following the opening, mentioned the gratitude of the mining district of Ince to the Board for the amount of coal used in gas-making.

Coal first

In reply Mr. Hodkinson emphasised that, despite proposals to import natural gas, the North Western Gas Board were determined, as far as they were able, to satisfy the heating demand for the area by methods of gas production based on coal.

The problem was how to make best use of that coal, and the gas industry was trying to find methods of using coal equal to the use of natural gas in other countries.

M.P. IS SHOWN HOW EASILY THE SYSTEM WORKS

Mr. Hodkinson demonstrates a simple temperature control to Mr. Tom Brown (left)

Councillor Sharples (left) and Councillor A. Rowlandson feel the hot air which warms a living room.

Keith Blackman profits increase

KEITH BLACKMAN LTD. made a Group trading profit for the year ended March 31, 1961, of £259,616 against £218,277 in the previous year, after charging directors' remuneration, audit fees, and depreciation. The profit for the year before taxation was £275,528 against £236,694.

The profit for the year after taxation was £123,456 against £122,410, and a dividend is proposed on Ordinary shares of 17½% less income tax.

Pictures tell story of gas in the North

MORE than 150 delegates to the northern regional conference of the National Housing and Town Planning Council accepted a joint invitation by the Northern Gas Board and Ascot Gas Water Heaters Ltd. to a reception held at the Royal Hotel, Whitby.

They saw in pictorial form the story of gas in the north, as applied to all types of housing, from traditional houses to multi-storey flat blocks, from dwellings equipped with gas room heaters and all other main heat services by gas to the ultimate in present day development, warm air heaters and multi-point gas water heaters and drying cabinets sited on SE-Ducts.

The delegates were given information on capital costs of the gas-fired equipment and running costs.

COMPANY MEETING

PARKINSON COWAN LIMITED

Mr. Hugh P. Barker's Statement

THE Annual General Meeting of Parkinson Cowan Limited was held on August 23 in London. The following is an extract from the statement by the Chairman, Mr. Hugh P. Barker:

The accounts cover the 15 months to the end of March 1961. In October 1960 I warned you that your Company was suffering a reversal of fortune and gave a thumbnail sketch of the reasons. Now I can tell you more fully about the salvo of misfortunes which hit our domestic appliance business.

The accounts show that a gross trading profit of £307,301 emerged for the 15 months compared with £728,438 for the preceding 12 months. Your Board continued to apply our usual austere depreciation policy by charging £230,819 (£179,481 for 12 months).

Your Directors recommend that having already paid a 5% interim, a final Ordinary Dividend of 6¼% be paid for the 15 months. This is equivalent to a rate of 9% per annum.

For several years past I have drawn your attention to the fluctuating profitability of the appliance business and of a need to provide for a dividend equalisation to soften the impact of a reverse. Your Company having built up a Dividend Equalisation Reserve of £70,000 proposes to draw £31,000 from this reserve.

Our Appliances Division started 1960 with a full order book and a high rate of earning. The first misfortune was that the wave of labour disturbances which the Midlands were then experiencing flowed into our factory and took the form of a series of departmental strikes which finally brought the factory to a virtual standstill.

By the time the plant was working normally again the Government had reimposed Hire Purchase restrictions and sales suffered severely.

From this chastening period we are slowly recovering, but the prospects for this year are not bright, though in the longer term they are unimpaired.

Our gas meter business is suffering from a declining home market demand and severe price competition.

Our liquid meters and pump business is doing well, and our constantly widening product range is increasing our Company opportunities.

Our Industrial Products Division had an excellent year working in close accord with the gas industry.

Our newly-acquired business, Bastian and Allen Ltd., also had an excellent year.

Your Company is making a determined fight to increase its business overseas. Last year our overseas sales were a record.

I have referred on previous occasions to your Company's needs to raise further capital. The size of our bank overdraft demonstrates this need, but we must clearly wait for a time before making a rights issue. In the meantime we are in close consultation with our bankers and do not feel ourselves precluded from the pursuit of an expansionist policy.

The domestic appliance side of our business is slowly recovering, but it is unlikely to contribute to our profits again before 1962.

Our other activities should together show a reasonable return.

Your Directors continue to pursue a policy which reduces their dependence upon domestic appliances without diminishing their determination to continue their long and successful operations in that business. To this end, your board is engaged in negotiating a major purchase in the industrial heating field.

The report and accounts were adopted.

Copies of the report and accounts can be obtained on application to the Secretary at Terminal House, Grosvenor Gardens, London, S.W.1.

CALOR GAS DIVIDEND

THE final ordinary dividend of 8% announced by Calor Gas makes a total of 12%.

For the preceding year the total payment was equivalent to 11¼% allowing for the scrip issue, says *The Times*.

After an increased charge for depreciation (£740,372, against £639,398) the pre-tax profit is down by about £60,000.

Tax absorbed £300,087 (£335,634), giving a net figure of £528,741, compared with £553,767.

AGREEMENT ON CONTROL DEVICES

AGREEMENTS have been made between the Rheostatic Co. Ltd. and Robertshaw Controls S.A., of Geneva, for co-operation in a wide variety of devices in fields of common interest.

Robertshaw Controls S.A. is a subsidiary of Robertshaw-Fulton Controls Company of Richmond, Virginia, U.S.A., a leading manufacturer in the United States of thermostatic and other control devices. The Rheostatic Company is a subsidiary of Elliott-Automation.

NEW ISSUE OF 'CLEAN AIR YEAR BOOK'

A NEW feature of the 'Clean Air Year Book, 1961,' which has just been published, is a table of local authorities in the 'black areas,' which shows the progress they have already made in the setting up of smoke control areas under the Clean Air Act, their eventual targets, and the dates by which they expect to reach them. The table shows, by empty spaces, the authorities which so far have made no progress.

The Year Book, which is published by the National Society for Clean Air (Field House, Breams Buildings, London, E.C.4) at 2s. 6d. net, is a mine of information about air pollution and its prevention.

£222,000 bill for fittings

THE cost of adapting and replacing fittings for the burning of smokeless fuels in houses and other premises in the western area of Pollokshields, Glasgow, is estimated at £222,000.

The figure was given in Glasgow by Councillor M. S. Miller at a public inquiry into the Pollokshields (No. 2) Smoke Control Area Order, 1960.

The area covered by the Order extends to 2,010 acres and includes about 6,000 houses, 54 commercial premises, three industrial premises and about 50 miscellaneous premises.

NEW PLANT FOR AMMONIA

A CONTRACT covering the complete supply of a new synthetic ammonia plant has been awarded to Chemical Construction (G.B.) Ltd., London, by Nitrogen Fertilisers Ltd., Flixborough, Nr. Scunthorpe.

The new plant will be located adjacent to an existing plant and will more than double the overall ammonia production capacity of Nitrogen Fertilisers Ltd.

Completion of the project is expected in the latter part of 1962.

Russia orders conveyor belts

FOLLOWING negotiations during, and subsequent to, the recent British Trade Fair in Moscow, BTR Industries Ltd. has been awarded a further major order for conveyor belting of similar construction to BTR belts supplied in 1958 and at present in service in the U.S.S.R.

The new Russian order, for more than five miles of belting, is worth over £250,000. Deliveries will commence in September.

PERSONAL NOTES

MR. R. E. SILLS, assistant service and sales manager at the Scottish Gas Board's Central and Northern Division headquarters in Perth, has been appointed to the post of New Buildings Officer of the Division. In his new position, he will have control of the Board's staff qualified to consult and advise on the installation of gas supplies and equipment in new buildings.

MR. D. MUNRO has joined the field sales force of the Scottish Gas Board in the Wick, Thurso area. Since 1956, he has been with the East Midlands Gas Board in Lincoln, principally in their sales organisation.

MR. H. A. LONGDEN, Chairman of the West Midlands Division of the National Coal Board is leaving its services to take up the post of Deputy Chairman and Chief Executive of the Cementation Co. Ltd.

Interim dividend

The Cork Gas Consumers' Company has declared an Interim Dividend of 4% for the year ending December 31, 1961, made payable on August 31, 1961.

N. Juniors hold annual meeting

OFFICERS elected at the annual general meeting of the Northern Junior Gas Association at Stockton recently were: President, Mr. L. Nelson, Blyth; Senior Vice-President, Mr. J. R. Matthew, Shotley Bridge; Junior Vice-President, Mr. J. T. Lewis, Sunderland; Honorary Secretary, Mr. S. G. Irvin, Newcastle; Honorary Treasurer, Mr. C. H. Ling, Darlington; Honorary Transactions and Publicity Secretary, Mr. R. J. K. Shepherd, Carlisle; Members of Council, Mr. W. Cummings (Newcastle), Mr. N. Henderson (Chester-le-Street), Mr. S. G. Irvin (Newcastle), Mr. R. J. K. Shepherd (Carlisle); Northern District Education Committee, Mr. E. Sheldon (Middlesbrough), Mr. H. Waiton (Howdon), Mr. J. T. Lewis (Sunderland); Honorary Auditors, Mr. A. O. Old (West Hartlepool), Mr. H. E. Banks (Northallerton).

Mr. G. E. Haddon, retiring President, invested Mr. L. Nelson with the Badge of Office as new President.

Mr. K. E. Brown, Chairman of the North of England Section, Institution of Gas Engineers, and Mr. W. Cummings, Secretary of the North England Section, Institution of Gas Engineers, were elected Honorary Members.

Presentation of the Society of British Gas Industries Silver Medal was made by the President to Mr. G. Taylor, Newcastle.

Presentation of Certificates to the retiring President, Mr. G. E. Haddon, was made by the President, Mr. L. Nelson.

Mr. Haddon, in replying, said he had enjoyed his year of office and thanked members for their support at all meetings. He regretted that his year as President had been marred by the retirement of Mr. Bob Proud as Secretary, due to ill-health. He thanked Mr. Ling for carrying on the duties of Acting Secretary to the annual general meeting.

COMING EVENTS

September 18. — WEST MIDLANDS G.C.C.: Conference Room, Gas Offices, Edmund Street, Birmingham.

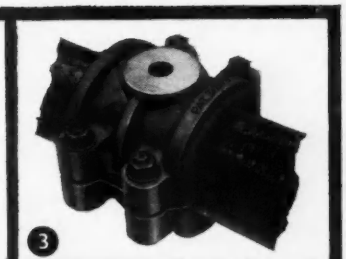
September 18.—NORTH EASTERN G.C.C.

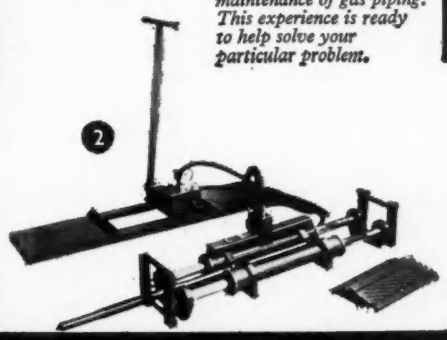
September 20. — SOUTH WESTERN G.C.C.: Plymouth.

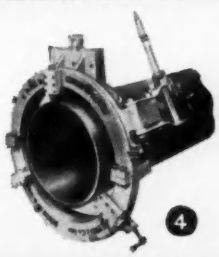
September 29.—BRITISH JUNIOR GAS ASSOCIATIONS' JOINT COUNCIL: Glasgow. Annual Meeting.

PASS
the word in gas distribution

These photographs show only a small fraction of Pass equipment for gas distribution. In our fifty years' experience, we have met and answered almost every problem in the installation, repair and maintenance of gas piping. This experience is ready to help solve your particular problem.







1 Hydraulic Service Pipe Extractor for removing old or defective pipes from underground with minimum excavation.

2 Hydraulic Thrust Boring Machines for laying mains and services without costly excavations. Hand and power operated. Junior model available.

3 6-Bolt Leadless Split Collar with patent single piece moulded rubber joint. Fitted with only one spanner and pressure tested to 300 p.s.i.

4 Number 5 enclosed spur gear driven Pipe Cutting Machine with air motor drive. For pipes 24"-30" diameter. Spring loaded Tool Boxes for weld preparation available.

PASS
GAS AND WATER ENGINEERS

Specialists IN UNDERPRESSURE ENGINEERING
E. PASS & CO. LTD. DENTON, MANCHESTER *Tel: Denton 3001/2/3 Telegrams: 'Tools' Denton Manchester*

PA.189

PUBLISHERS' NOTICE

The "Gas Journal" is published every Wednesday, price 1/6d.; by post 1/9d.

Subscription Rates : Home 65/- ; Overseas 72/6 per annum ; (Both payable in advance.) A copy of the "Gas Journal" Directory is presented each year to continuous subscribers.

Classified Advertisements : All small classified advertisements are charged at 3/6 per line (approx. 7 words)—minimum charge 10/6. A Box Number address occupies 2 lines, and a further 1/- is charged toward cost of postage on replies. Copy must be received by first post on Monday to ensure insertion in that week's journal.

Displayed Advertisements : Rates obtainable on application to the Business Manager. Change of copy for displayed spaces must be received 14 days prior to publication if proofs are required. Type area of inside pages 10in. deep x 7 in. wide; block screen 120.

BUSINESS MANAGER S. T. CULLEN

NORTHERN MANAGER: J. W. Courtney, 65, Foundry Avenue, Leeds, 8. *Telephone*: Leeds 655854

SOUTHERN REPRESENTATIVE: R. F. Crocker, 11, Bolt Court, Fleet Street, London, E.C.4. *Telephone*: FLEet Street 2236-7

MIDLANDS REPRESENTATIVE: Gerald F. Harwood, 76, Broad Lane, Kings Heath, Birmingham, 14. *Telephone*: Highbury 4502.

WALTER KING, LTD., 11, Bolt Court, Fleet Street, London, E.C.4.

Telephone: FLEet Street 2236-7. *Telegrams*: Gasking, Fleet, London.

22—7/58

J. BROWN & CO. LTD

SAVILE TOWN, DEWSBURY, YORKS.

Supply:—

"BROWNOX-de-LUXE"

PURIFYING MATERIAL

Purchase:—

SPENT OXIDE

PATENTS AND TRADE MARKS

KINGS PATENT AGENCY, LTD.

(Director, B. T. King, A.I.M.E.), Patent and Trade Mark Agents, 146a Queen Victoria Street, London, E.C. Booklet on request. City 6161.

APPOINTMENTS VACANT

SOUTH EASTERN GAS BOARD

ASSISTANT ENGINEER DESIGNATE

(CARBURETTED WATER GAS PLANT)
EAST GREENWICH WORKS, GRENFELL STREET, S.E.10

APPLICANTS should be corporate members of the Institution of Gas Engineers or possess equivalent qualifications, and should have had experience in the control and operation of gas works plant.

The successful applicant will be responsible to the Deputy Station Engineer for the technical control and general administration of water gas plants having a total capacity of 47 mill. cu.ft. per day, and also for the associated ancillary plant.

Salary within range £1,580-£1,780 per annum.

Applications in writing, quoting reference V10/1540, and giving full details, should reach the Personnel Manager, S.E.G.B., Katharine Street, Croydon, not later than September 18, 1961.

RADIATION LIMITED will shortly have vacancies in their Gas Cooker Research Laboratory for Staff to undertake research and development work on domestic gas cookers. Candidates should preferably be graduates in Physics, Chemistry or Fuel Technology, or have had previous experience in this type of work. Applications giving full details of age, qualifications, experience, and present salary to: Personnel Officer, Radiation New World Limited, Warrington Production Centre, Grappenhall Works, Warrington, Lancs.

NORTHERN GAS BOARD

DARLINGTON DIVISION

TECHNICAL ASSISTANT AT THE DARLINGTON GAS WORKS

APPLICATIONS are invited for the above post.

Modern plant at Darlington includes Oil Gasification Plant, L.D.F. gasification on C.W.G. plant and Glover West Continuous Vertical Retorts, and the post offers a wide experience in all aspects of gas production.

Minimum grading will be APT. 5/6 (£660-£810 per annum), but the Board reserve the right to place the occupant, either at the time of appointment or later, in Grades 7 or 8 (£770-£930 per annum) should his qualifications, experience or performance of the duties of the post merit such higher grading.

The post is pensionable, and the successful candidate will be required to pass a medical examination.

Applications, stating age, qualifications and experience, together with the names of two referees, should be received by Mr. Charles Hindle, Deputy Divisional Manager, Gas Offices, John Street, Darlington, not later than September 11, 1961.

F. WILSON,

EAST MIDLANDS GAS BOARD

LEICESTER AND NORTHANTS DIVISION,

require

a fully qualified

HOME SERVICE ADVISER

for the North-West Leicestershire District based on Loughborough.

Salary within range £495-£670 dependent upon age and experience.

Applications to reach

Divisional General Manager,
Market Street, Leicester,

within 10 days of this advertisement.

EAST MIDLANDS GAS BOARD

LINCOLNSHIRE DIVISION

As a direct result of promotion the appointment of

SHOWROOM SUPERINTENDENT, GRANTHAM,

has become vacant.

Applicants should be thoroughly successful salesmen with a good knowledge of gas appliances, experienced in display and possess the ability to control staff.

Salary will be within the range £660-£760

Detailed applications should be addressed to—

Divisional General Manager,
East Midlands Gas Board,
Belle Vue House,
Carline Road,
Lincoln,

to arrive not later than September 9, 1961.

EAST MIDLAND GAS BOARD

AN INDUSTRIAL GAS ENGINEER

is required on the staff of the Divisional Industrial Gas Engineer in Leicester.

Applicants should have experience in the design and installation of industrial gas equipment and in the promotion of industrial gas sales.

Candidates should be qualified in gas engineering or in fuel technology.

Salary within range £975-£1,180.

Apply within ten days to:—

Divisional General Manager,
East Midlands Gas Board,
Market Street, Leicester.

WALES GAS BOARD

CARDIFF UNDERTAKING

DOMESTIC INSTALLATIONS OFFICER

APPLICATIONS are invited for the above position in the Cardiff Undertaking, covering 85,000 consumers.

Applicants should have appropriate qualifications in Gas Supply. Possession of the Institution of Gas Engineers A.M. Certificate in Supply or equivalent would be an advantage, and it is essential to have had a wide experience in the installation of all types of appliances, job administration and supervision of staff.

The successful applicant would be required to control and organise the activities of the Fittings Staff and to apply up-to-date techniques in gas fitting methods.

The salary offered is within APT 12 Provincial 'A' of the National Salary Scales for Gas Staffs (£1,115-£1,260 per annum).

The post is pensionable and subject to a satisfactory medical examination.

Applications, stating age, qualifications and full details, together with the names of two Referees, must be received by the Undersigned within 10 days of the appearance of this advertisement.

J. POWDRILL,
General Manager and Engineer.

Bute Terrace,
Cardiff.

SALES Representative required for George Wilson Gas Meters Ltd. and its subsidiary company, Radiant-Heating Ltd., to cover the Southern Gas Board area only for George Wilson Gas Meters Ltd. and territory in the south and east of England on behalf of Radiant-Heating Ltd. Good contacts with the Gas Boards and heating industry are essential and a sound knowledge of gas heating applications is necessary. Good basic salary, commission, expenses and contributory pension scheme.

Apply in writing, giving full details of qualifications, to:—

Managing Director,
George Wilson Gas Meters Ltd.,
Foleshill Road,
Coventry.